Industry Cluster Progress Report

November 1999

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For more information about Connecticut's Economic Competitiveness Strategy, visit our Web site: www.state.ct.us/ecd

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Connecticut's Economic Competitiveness Strategy

Cluster-based Economic Development

Connecticut's cluster-based economic-development initiative is based on the idea that nurturing the state's key industries improves the competitiveness of businesses within these industries, in turn boosting our economy. By combining the market knowledge and expertise of businesses with the talents and resources of government, education and economic-development organizations, Connecticut's industry clusters better prepare each of their members to face the challenges created in the global marketplace.

"Industry cluster" is an economic development concept championed by Dr. Michael Porter of the Harvard Business School. Dr. Porter is respected worldwide as an expert in global economic strategies and was among the first to recognize the power of clusters to boost regional economies.

A cluster is defined as a concentration of companies and industries in a geographic region that are interconnected by the markets they serve and the products they produce, as well as by the suppliers, trade associations and educational institutions with which they interact.

Industry clusters exist both in the U.S. and around the world. The most famous domestic clusters include: Silicon Valley for its microelectronics, biotechnology, and venture capital markets; Route 128 in Massachusetts for its software, computer and communications hardware, and health care technology markets; North Carolina's Research Triangle for its pharmaceutical, agriculture, and telecommunications markets; and Hartford for its insurance and finance markets. Overseas examples include Norway's maritime cluster, Italy's footwear cluster and France's winemaking cluster.

Creating a business environment in which clusters can grow and prosper takes an enormous amount of cooperation between government and industry. A task force of 125 business leaders was assembled to study the best method of implementing cluster-based economic development in Connecticut.

The task force identified six industry areas key to Connecticut's economic competitiveness: Tourism, Financial Services, Health Services, Telecommunications and Information, and High-Technologies and Manufacturing. Their research also led to the legislation passed in 1998, effectively launching Connecticut's Industry Cluster Initiative under the Department of Economic and Community Development.

Overview of Progress

Throughout 1998, progress was made in a number of areas related to nurturing industry clusters. One of the most important steps was the establishment of the Governor's Council on Economic Competitiveness and Technology. The council comprises CEOs from a cross-section of industries, legislative leaders, heads of key educational institutions, labor representatives, officials of industry associations and several state commissioners. The council meets at least twice annually to monitor cluster progress and find new ways to enhance Connecticut's businesses and workforce.

BioScience Cluster

With the establishment of the BioScience Cluster, the benefits of a public/private partnership have begun to be realized. Overseen by Connecticut United for Research Excellence (CURE), the information source for biomedical research in Connecticut, the cluster started with \$150,000 in state seed money and \$350,000 from industry contributions.

The BioScience Cluster's activities so far have led to the establishment of a BioScience Facilities Fund totaling \$40 million. Managed by Connecticut Innovations, the state's technology investment arm, the fund will underwrite the development of at least 150,000 square feet of incubator and lab space.

Economic Foundation

A number of other cluster-related projects have taken shape over the last year in areas including manufacturing, workforce development, urban revitalization, transportation infrastructure, regulatory and tax climate, and international trade.

◆ Through a modification of CONN/STEP's historic role, a Manufacturing Resource Center has been created and is well on its way to introducing "lean manufacturing" techniques and advanced technology to thousands of Connecticut manufacturers.

- Over \$1 million has already been committed to support three major workforce development initiatives:
 - Upgrading manufacturing technical education and training in four school districts
 - Creating business training networks throughout the state to increase business involvement and strengthen demand driven training
 - Supporting MetroHartford Millennium Project's Precision Manufacturing Training Program, in conjunction with three community-technical colleges and area manufacturers
- A high priority has been placed on urban revitalization and human-capital development in our inner cities. In conjunction with the Initiative for a Competitive Inner City (ICIC), the Governor's Council is supporting a five-city project that will result in unique business-development strategies and build on the inherent competitive advantages of inner-city locations in Connecticut.
- ◆ The Department of Transportation, the Bradley Commission and the Governor's Council are working together in a strong public/private partnership to build Bradley International into a truly world-class airport and create a powerful engine for economic growth in the region.

Updates on these and many other cluster-related initiatives are contained in this report.

James F. Abromaitis

Commissioner

Department of Economic and Community Development

William J. Kaufmann

Chairman and CEO

Connecticut Economic Resource Center, Inc.



Executive Summary

Importance to Connecticut's Competitiveness Strategy

Cluster activation is a critical first step toward realizing the potential of a group of industries as an engine of economic growth. Clusters are activated when companies in related industries come together formally as an organized industry cluster. Working with each other and with the public sector in a spirit of collaboration and cooperation, cluster members become more innovative, more productive, and therefore, more competitive. Corporate leaders initiate cluster activation and drive the cluster's activities. The public sector's role is to support and facilitate cluster activation.

Progress to Date

- BioScience, Aerospace Components
 Manufacturers, and Software/Information
 Technology clusters are up and running.
- The Department of Economic and Community Development has provided seed funds totaling \$425,000 to the three clusters activated to date and will leverage over \$1 million in in-kind

matches and private investment.

- A focused study of Connecticut Marine is under way.
- Agriculture, Seafood, and Plastics are in the early stages, but progressing.
- Photonics is in the exploratory phase.
- Each cluster is in a different phases of maturation and has unique needs.

Challenge

- Maintain each cluster's forward momentum while refining the program support elements appropriate to each one's developmental stage.
- Identify the outcome metrics to be applied to the cluster program.
- Meet the state's goals by identifying and providing special attention required by key clusters.
- Support Connecticut's major clusters (finance, insurance/reinsurance, medical devices, etc.)

See following pages for details.

1 BioScience Cluster

PROGRESS

In fall 1998, corporate leaders from pharmaceutical companies and biotechnology firms led the activation of Connecticut's BioScience Cluster and continue to guides its activities and initiatives.

DECD invested \$150,000 and leveraged \$350,000 of private investment.

CURE, the cluster's organizational center, has been managing Connecticut's BioScience Cluster for one year and continues to make progress on its long-term plan. The cluster membership now includes over 90 Connecticut organizations, and CURE has submitted a plan/proposal to DECD for a second year of operation. Highlights of progress include:

All necessary organizational changes have been completed:

- CURE's Certificate of Incorporation amended to include cluster work. Mission Statement now reads: To educate and inform the public about biomedical research and biotechnology and to engage in activities to further, advance and support such research and technology.
- A new board of directors created representing the top leadership of cluster members
- Five operating councils were activated, each chaired and populated by clustermember employees. The councils are:
 - Business Development & Technology Transfer
 - Clinical Research and Bioethics

- Education and Training
- Public Affairs
- Research Methods

Highlights of the cluster's goals and action steps:

Goal 1 – Stimulate and enable the growth of existing companies, facilitate formation of new bioscience companies and promote the recruitment of companies from outside Connecticut.

Completed Action Steps

- Analysis of financing and economic incentive packages, annual analysis of laboratory space needs, economic report and active support of cluster legislative package.
- State-of-the-industry research trips to California, Maryland and North Carolina.
- Redesigned and publicized Web site (www.curenet.org) as primary means of communication, including links for job openings, real estate properties for lab space and funding sources.

Goal 2 – Facilitate information exchange and communication among cluster members.

Completed Action Steps

- Informational seminars (clinical research, real estate, legal, accounting, venture capital).
- Liaison work to 10 different organizations and groups involved in bioscience-related work.
- Special real estate programs related to lab space and CII funding.

Goal 3 – Publicize and promote the cluster's socioeconomic contributions and potential.

Completed Action Steps

- Quoted in more than 100 press stories and noted in 12 positive editorials.
- ◆ Nearly 1,167,000 hits to two Web sites.
- Collaborated in the development of new statewide image campaign and adopted a bioscience marketing campaign.
- Exhibitor/sponsor and attendee at Bio'99.
- ◆ 22-page cover story in September/October issue of CT Business Magazine.

Goal 4 — Collaborate in the development of a skilled and entrepreneurial workforce to meet the future needs of the cluster companies.

Completed Action Steps

- Sponsored four biotech seminars for high school teachers and students.
- Distributed posters, school-to-career video and accompanying discussion guide to schools statewide.
- Produced a new issue and updated five issues of BioRap, posted on Web site and licensed discs to out-of-state groups.

BioScience Facilities Financing

One of the first recommendations made by the BioScience Cluster was the establishment of a BioScience Facilities Fund to be used to underwrite the development of incubator and laboratory space in the state.

The General Assembly responded and, during the 1998 and 1999 sessions, enacted legislation that resulted in a \$40 million fund for that purpose. The fund is managed by Connecticut Innovations, which is responsible for a number of funds and programs dedicated to encouraging the growth of high-technology industries in the state.

PROGRESS

Results and Work in Progress – Subsequent to our last report, Connecticut Innovations has closed deals amounting to \$6,925,000, for a total of \$14,850,000 invested since the fund's inception. An additional \$13,000,000 is currently under discussion.

Connecticut Innovations continues to review and negotiate with business and real estate developers, both in and out of state, for viable projects that will positively impact the industry.

BioScience Facilities Financing Initiative Status Report As of Nov. 22, 1999						
Company	Location	Туре	Sq. Ft	Amount		
Genaissance Pharmaceuticals	Bldg. 5N, Science Park	Direct Loan	20,000	\$950,000*		
Research/Dev., Bayer Corp.	Woodbridge	Guarantee/ Line of Credit	20,000	600,000*		
Modular incubator labs	Science Park	Purchase	3,000	600,000*		
Neurogen	Branford	Direct Loan	20,000+	5,000,000*		
Genaissance Pharmaceuticals	Bldgs. 5N, 5S, Science Park	Direct Loan	Up to 25,000	2,720,000**		
Cellular Genomics	Bldg. 5, Science Park	Equity/Loan	13,000+	1,500,000**		
CT Technology Dev. Corp.	Bldg. 25, Science Park	Operating lease	4,000	600,000**		
Iconics, Inc.	Bldg. 5S, Science Park	Direct Loan	7,500	1,380,000**		
Molecular Staging, Inc.	New Haven area	Direct Loan	20,000+	1,500,000**		
TOTAL			•	\$14,850,000		

^{*}Deal closed

^{**}Closing expected within 60 days

- ◆ Real Estate Portfolio Manager This new staff member reports to the Director of Life Sciences and is on staff three days per week. He is currently reviewing and, where appropriate, recommending a streamlined set of policy and procedures, which should be finalized by Dec. 31, 1999.
- ◆ Program Utilization Through the cluster's efforts, biotechnology companies have been informed of the program and have come forward with applications for program support. These inquiries have come from start-up companies as well as from more well established and publicly traded Connecticut biotech companies. The initiative has developed to include creative financial vehicles, including some with equity components, as well as direct loans. In addition, Science Park has been chosen as the site for approximately 15,000 square feet of speculative space in order to meet the immediate demands of new biotech firms.
- **Outreach Efforts –** Connecticut Innovations' outreach program has resulted in interest being expressed by commercial bankers, developers, brokers and others. The April 1999 real estate finance industry breakfast stimulated further feedback from the target community, and other outreach programs were conducted at CEDAS (Connecticut Economic Development Association) on June 8 as well as at Interact — a consortium of Hartford-based architects, engineers and developers — on June 30, 1999. In addition, CURE has formed a Real Estate committee comprising private- and public-sector individuals, and a presentation was made to this group on Sept. 13, 1999. Continuing meetings with CURE serve as excellent forums in which to bring together representatives from all the sectors germane to this effort, including academics, biotech industry representatives, commercial developers, government entities, and commercial bankers.

2. Aerospace Components Manufacturers Cluster

PROGRESS

A core group of aerospace components manufacturers has initiated a program to strengthen Connecticut's aerospace cluster by enhancing the productivity, knowledge of manufacturing skills, and operating costs of the sub-tier supplier community.

Aerospace Components Manufacturers (ACM) has created a two-year plan aimed at achieving worldwide recognition as a premier source of aerospace components. Through DECD support, a new, non-profit 501 C (3) organization has been formed to manage the group's programs under the direction of a six-member board of directors. all of whom are company presidents.

DECD's investment of \$125,000 will be leveraged with over \$500,000 in industry support.

ACM's program has four main elements. Each is planned and managed by teams of representatives from member companies.

Highlights of the Cluster's goals and action steps:

Goal 1 – Progressive Manufacturing Practices: Learning and training in lean manufacturing methods as adapted to the small-company business sector.

Completed Action Steps

In close collaboration with CONN/STEP, ACM has:

 Executed over a dozen progressivemanufacturing training events at member companies utilizing local, national and international experts.

- Conducted the first in a series of Lean Manufacturing General-Awareness Seminars utilizing CONN/STEP and continuous-improvement coordinators from member companies. Over 20 members from 10 companies attended this seminar.
- ◆ Created a "Lean 101" Tool Kit & Manual and a "Train-the-Trainer" process to bring this general-awareness seminar to employees at member companies.

Goal 2 – Workforce Development: Creating and managing a standing curriculum for raising the general manufacturing competency of the incumbent workforce.

Completed Action Steps

- ACM commissioned a local training organization to design a course curriculum based on employee needs at member companies and nationally recognized machining skill requirements.
- With Department of Labor financial support, ACM has or is in the process of conducting seven manufacturing skills courses involving multiple company participation. Courses include shop mathematics, blueprint reading, geometric tolerancing, heat treating, metallurgy and root-cause analysis. Over 70 employees from member companies are currently participating in these courses.

Goal 3 – Business Practices for Competitive Enterprises: Establishing vehicles for learning and implementing modern methods for improving the commercial productivity of small companies, e.g., implementing ISO processes and/or selective consolidated purchasing.

Completed Action Steps

- ACM has signed a purchasing agreement on behalf of its member companies for volume-based discounts on machining inserts. A portion of the volume rebates generated by this program will be used to fund the future operations and programs of the ACM.
- Plans have been initiated for implementing three additional purchasing programs (gage calibration, abrasives and office products) in the fourth quarter of 1999.

Goal 4 – Special Programs: Tasks focused on managing the growth of the group, setting in place a business/financial plan, creating an intra-communications vehicle and conducting focused promotional projects.

Completed Action Steps

- ACM has retained an associationmanagement firm to manage administrative, financial and communication functions. Through this relationship, ACM has also secured the services of a full-time executive director with full administrative support.
- ◆ ACM has established an active recruitment program to attain set membership goals of 20 companies by Dec. 30, 1999; 40 companies by Dec. 31, 2000; and 60 companies by Dec. 31, 2001. From six core members, the cluster has increased membership to 13 companies and fully expects to achieve all its year-end goals.
- ◆ A Special Projects Team has been created to conduct focused promotion projects.

3. Software/Information Technology Cluster

PROGRESS

Connecticut Technology Council (CTC) has taken the leadership role in organizing and activating this cluster through its membership and a statewide recruitment effort. A plan has been approved by DECD for CTC to manage the cluster and all of its activities, including administrative, research and technical support, as well as providing a director to implement the strategies outlined in the plan.

DECD's \$150,000 investment will be matched by more than \$300,000 of industry support.

The highlights of the plan are:

Vision:

Connecticut will be a nationally recognized, widely respected and preferred location for vibrant and growing software and informationtechnology companies, including related services and support industries.

Objectives:

To sustain and facilitate the continued growth of the state's software and informationtechnology industry and to develop a culture that both responds to industry needs and encourages increased entrepreneurial activity.

Goal 1 – Achieve national recognition of the vibrant and dynamic software/IT cluster in Connecticut.

Objectives:

◆ Identify and profile the Connecticut software/IT industry on an ongoing basis.

- Develop a central source for current information on Connecticut's software/IT industry.
- Support initiatives of industry members to achieve growth and increase awareness of their companies.
- Serve as a liaison between state agencies, private-sector and academic institutions on behalf of the software/IT industry members.

Goal 2 – Foster growth and collaboration within the industry and with other companies and organizations.

Objectives:

- Create an environment that supports and encourages start-up and early-stage software/IT companies.
- Create business alliances among Connecticut software/IT companies.
- Heighten awareness within the broader corporate community of the variety and quality of local software/IT vendors.
- Open markets within large corporations to local software/IT companies.
- Draw the attention of key public and private economic development agencies to this sector's development and work to develop public/private collaborations where appropriate.

Goal 3 – Create a robust pipeline of people well-trained in software/IT and related disciplines.

Objectives:

- Provide Connecticut companies access to students in software/IT disciplines.
- Work with companies to identify and define present and future workforce needs and establish best practices in recruitment and retention.
- Form alliances between Connecticut colleges and universities and companies in order to develop and refine initiatives to meet industry workforce needs.
- Facilitate the development of educational policies in the best interest of the software/IT cluster and other employers of IT workers.

Goal 4 – Growing the Software/IT Cluster: Continued Cluster Activation and Development:

Objectives:

- Maintain and grow the Software/IT Cluster in Connecticut, welcoming new companies.
- Attract representation from a broad and growing base of Connecticut software/IT companies.
- ◆ Achieve Cluster self-sufficiency.

4. Connecticut Marine Cluster

PROGRESS

The Ocean Technology Foundation (OTF), with DECD funding, is conducting a focused study of the Connecticut marine industry to establish a basis for a plan of action. A core group of Connecticut's marine business leaders have convened a series of fact-finding meetings to identify the industry's challenges and assess the marine industry business climate.

Findings include:

- Connecticut's marine industry is extensive and fragmented.
- ◆ The economic significance of the marine industry to the state is not understood.
- ◆ The marine industry must compete with neighboring states that offer a very competitive marine business climate.
- Development of the state's marine workforce is needed to fully support the needs of the marine industry.
- The ability of the marine industry to support the state's environmental requirements is hampered by the mechanisms that govern its policies and procedures.
- Connecticut is not recognized as a maritime state, despite its length of coastline and deep-water ports.
- The Department of Transportation's actions and policies have a major effect on the competitive position of the marine industry.

The Marine Cluster core group will explore these assessment points and others over the next four months and establish a plan of action.

5. Other Potential Cluster

Agriculture

An industry-based advisory board has been formed to guide the development of a strategic plan for the agriculture industry of Connecticut. The board is made up of business leaders (representing the sectors: fruits and vegetables, greenhousing, dairy products, poultry products, aquaculture, wine making) plus the executive directors of the Green Industry and Farm Bureau, and the commissioner of agriculture. The board has initiated a process to identify a qualified consultant to facilitate the strategic planning process.

Seafood

Connecticut's Seafood Council has initiated a planning project to assess this subcluster's needs and opportunities.

Plastics

Connecticut's Plastics Council has formed a cluster planning group of business leaders to identify the industry's opportunities and needs, as well as factors that threaten it. The group is making plans for a cluster- focused program that would have high priorities for workforce development and lean manufacturing.

Photonics

The significant growth of Connecticut's photonics-technology-based industry indicates that it may be an emerging cluster. Efforts are under way to determine the appropriate form and level of support the state should provide to assist in its development. DECD is conducting a series of meetings with industry leaders to identify immediate needs and a business leadership group.

B. Manufacturing Resource Center

Executive Summary

Importance to Connecticut's Competitiveness Strategy

To compete successfully in the global economy, Connecticut manufacturers must achieve the efficiencies and cost reductions associated with lean manufacturing practices. Small and midsize companies need expert, affordable guidance to adopt and implement these processes in their workplaces.

Business leaders who were part of the original Manufacturing Cluster recommended the creation of a Manufacturing Resource Center to help companies gain access to the talent and support they need to become more competitive. Manufacturing executives continue to shape and guide the center's activities and initiatives.

Progress to Date

Among other activities, the Manufacturing Resource Center has conducted an aggressive outreach program to manufacturers, assisted more than 75 companies in lean manufacturing activities, collaborated with small manufacturers on 264 projects and provided more than 1,000 technical-assistance activities since July 1, 1998.

Challenge

Continuing to reach, educate and assist hundreds of Connecticut manufacturers in concepts and techniques critical to their survival and success.

See following pages for details.

Manufacturing Resource Center

The Manufacturing Resource Center was created in response to recommendations by the Manufacturing Cluster. The center's mission is to increase the use of progressive, lean manufacturing processes and advanced technology among smaller manufacturers, in order to help them compete successfully in the global economy. The center is part of CONN/STEP. Representatives from the Manufacturing Cluster serve on the board of CONN/STEP to ensure its activities and initiatives are tied to business needs.

PROGRESS

Direct Services to Business

- Assisted more than 75 manufacturers initiating lean activities, including lean assessments and continuous-improvement projects such as JIT production, cellular manufacturing, inventory minimization and continuous one-piece flow.
- Sponsored three basic awareness seminars during the first year of the initiative (FY '99) with over 175 attendees from small manufacturers; increased the level of three planned seminars for FY '00 by focusing on value stream mapping.
- Supported the Aerospace Components Manufacturers (ACM) cluster by supplying a lean field engineer to the progressive manufacturing (lean) team, organizing and assisting in execution of a Lean 101 training curriculum for ACM shop workers, and brokering and cost-sharing eight lean events.
- Between July 1, 1998, and Sept. 30, 1999, CONN/STEP made initial contact with over 1,400 small Connecticut manufacturers, resulting in 264 projects and approximately 1,100 technicalassist activities.

Program Development

- Initiated a "continuous-improvement audit" that uses nationally renowned lean consultants to critique and complement ongoing projects conducted by CONN/STEP field engineers and local service providers.
- Initiated a process for tracking impact metrics for all lean projects, including inventory, lead time, work in process, space reduction, and quality and throughput improvements.
- Hired two additional field engineers experienced in implementing lean manufacturing, bringing the total to seven.

Strengthening Capabilities

- Established working relationships with 20 regional and 10 national consultants specializing in lean practices and provided for discounts in their fees when working through CONN/STEP.
- Provided Lean 101 training, using instructors from the NIST Institute, to 12 field engineers to enhance their effectiveness in promoting lean manufacturing to the entire CONN/STEP client base.
- Hired an information-technology field engineer to provide Y2K awareness to small Connecticut manufacturers and to prepare to address Y2K problems as they develop.
- Documented each lean project using a professional technical writer to prepare a case study for public-relations, marketing and training purposes.
- Continued efforts with NIST Manufacturing Extension Partnership to develop and assist in the implementation of a Quality program for the Pratt & Whitney Connecticut supplier base.

C. Workforce Development

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Executives serving on the original Industry Cluster Advisory Boards identified workforce development as the single most important factor in Connecticut's ability to compete over the long term.

To attract and retain businesses in key industry clusters, a region must offer an adequate pool of qualified workers. To compete in a technologically advanced marketplace, companies must ensure workers' have the skills necessary to utilize sophisticated technology.

Connecticut has responded to business leaders' recommendations by creating a series of demand-driven training initiatives aimed at continuously improving the quality and availability of skilled workers.

Progress to Date

- ◆ The Connecticut Business Training Networks program was launched in May 1999. Three networks have been approved for funding; four are in the exploratory phase and three have expressed serious interest.
- ◆ Contracts were executed in October for four Secondary School Pilot Programs. So far, 35 students are participating in two programs, and marketing efforts are under way at two more.
- ◆ The Precision Machine Training Program begun in March 1998 is completing its second cycle. The placement rate from the first cycle was 98 percent; of the 74 students who have completed the second cycle, 70 are employed.

Challenge

Persuading businesses to overcome their reluctance to collaborate with competitors and their skepticism of government programs and, instead, recognize the benefits they can derive from joining forces in workforce training initiatives.

See following pages for details.

1. Connecticut Business Training Networks

There is a strong need for continuous training and education throughout an employee's career. The perception is that not many private-sector executives are sufficiently motivated to become involved in shaping the state's training and education system. Businesses are normally uncomfortable collaborating with their competitors. They are skeptical of government programs, controls, regulations and bureaucracies. They perceive the current system as supply-side-driven and thus not efficiently linked or tied to their needs.

The Connecticut Business Training Networks
Program, an initiative designed to overcome these
impediments, was launched in May 1999. The
program is marketed by CBIA, Connecticut's largest
business service organization, in partnership with
the Connecticut Economic Resource Center, the
Department of Economic and Community
Development, and the Department of Labor.

The Connecticut Business Training Networks Program affords small/midsize companies the opportunity to collectively define their workforce-development issues and develop strategic solutions to address them. Grants are awarded to eligible networks in three phases: exploratory (\$10,000) developing (each of 2 years at \$25,000) and operational (\$25,000) with the expectation that networks will become self-sustaining (funded by participating members).

PROGRESS

- ◆ Training Networks Established Applications for three Business Training Networks have been approved. They are:
 - Spring Training in Connecticut Five spring manufacturers in the Bristol area have

formed a training network aimed at improving workers' skill levels. They will identify mutual training needs, rank them in order of importance and investigate available training resources. DECD is providing a \$10,000 grant, and member companies are providing an in-kind match of \$15,650.

- Bridgeport Metal Education Training Alliance — Ten Bridgeport-area companies, primarily in the machine-tool, tool-and-die and metal-fabrication industry, have formed this network. They will work with the Bridgeport Economic Resource Center, Housatonic Community College and the Bridgeport ICIC project to identify common training and technology need and develop a comprehensive strategic plan providing targeted solutions to workforce- development challenges. DECD is providing a \$10,000 grant. Member companies are investing a total of \$10,050 in cash and in-kind match.
- Housatonic Education for Advanced Technology – This network comprises seven electronics-manufacturing companies in the Danbury area. They will work with an outside consultant to perform needs analysis and job profiling to reveal gaps between current and future skill and knowledge requirements. Using this information, they will develop a curriculum that meets members' common needs. Member companies are matching DECD's \$10,000 grant with \$10,000 cash and in-kind match.
- Additional Interest Several other groups have expressed an interest in becoming

Business Training Networks. They include automobile dealers, retail merchants, screw machine manufacturers, the software-development industry, the hospitality industry, and the bioscience industry.

- ◆ Marketing Marketing efforts and proposal solicitation began in June 1999. Outreach efforts include:
 - Meetings with employer-based organizations (e.g., chambers of commerce, professional organizations, and business associations).
 - Presentations at conferences, seminars, and industry-sponsored meetings.
 - Visitations/meetings with 58 companies, 11 educational institutions, and 25 business and/or professional organizations.

- ◆ Media Outreach Media outreach began with the July 1999 press release and has included:
 - More than 16 articles in Connecticut newspapers, magazines, and business journals.
 - Extensive radio coverage throughout the state.
 - Meetings with newspaper editorial boards (three have been completed and four others are scheduled).
- Materials Design and development of marketing materials is ongoing and includes:
 - Grant application (also accessible at CERC, DECD and CBIA Web sites)
 - Presentation folder
 - Flyer
 - Letterhead and business cards
 - Brochure (in design stage)

2. Secondary School Technical Education Pilot Program

The Manufacturing Cluster established a Secondary School Technical Education Pilot Program that links technical resources with the traditional high school experience.

The short-term objective is to provide students with both strong academics and state-of- the-art manufacturing training. The long-term goal is to optimize program successes by replicating and implementing "best practices" identified in the pilot programs throughout the state's secondary school and vocational education systems.

PROGRESS

Programs Selected and Funded — In January 1999, four programs were selected for funding: Northeastern Connecticut Manufacturing Initiative; Manufacturing Advanced Placement Program; Manufacturing Technology Cooperative Program; Windsor Public High School. Contracts for all four programs were executed in October 1999, and initial payments authorized. The delay in contract execution resulted in a slower program start-up than was originally projected; however, all programs are currently under way. DECD provided a total of \$420,000 to these four programs.

Reporting and Evaluation – Each program team is required to submit quarterly status reports based on criteria established by the Manufacturing Advisory Board. Reports identify milestones completed such as the establishment of an Industry

Governing Board, marketing activities, recruitment efforts, and specific career development activities. As the programs move forward, each will be evaluated on number of students who: graduated from the program; were vo-tech transfers; were placed in manufacturing jobs; furthered their education. Quarterly Peer Review meetings have also been established to provide a forum to share successful program design elements and to raise issues of mutual concern.

The status of the four programs is as follows:

- A. Northeastern Connecticut Manufacturing Initiative
 - Governing Board established
 - Marketing efforts include radio spots, newsletters, parent advisory meetings
 - 17 students recruited
 - Potential issue: transportation time
- B. Manufacturing Advanced Placement Program
 - Governing Board established
 - Marketing efforts include briefing sessions at four schools, use of DOL/manufacturers marketing videos
 - 18 students recruited
 - Potential issue: academic support

- C. Manufacturing Technology Cooperative Program
 - Governing Board established
 - Marketing efforts include Summer
 Manufacturing Camps for 51 7th and 8th
 graders, development of brochure with
 Waterbury Chamber of Commerce
- D. Windsor Public High School
 - Governing Board established
 - Marketing efforts include meeting with parents and students to review program goals, student field trips to various manufacturing companies, development of brochure
 - Potential issue: Impact of recent layoffs, plant closings and relocations on promoting career opportunities in manufacturing industry; need to publicize success stories and growth opportunities in small and midsize companies

3. Precision Machine Training Program

The Precision Machine Training Program was established to train and upgrade skills of the precision manufacturing workforce. Endorsed by the Manufacturing Cluster, the program was funded with \$1.6 million of private, federal and state funds. The first two cycles have been tuition-free for students.

Original launched by the Metro-Hartford Millennium Project, the program is a partnership of area manufacturers and three community-technical colleges: Asnuntuck, Capital and Manchester. It provides 780 hours of instruction, including class work, hands-on experience with a variety of machine tools, and job shadowing at

manufacturing plants. Certification that the student has net National Tooling and Machining Association standards for Level I Machinists is provided upon successful completion.

PROGRESS

A total of 169 students have graduated from the program so far, and 163 are currently employed by area manufacturers. Thirty-one additional students will graduate this fall.

D. Bradley International Airport

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Bradley is a critical asset for the Hartford—Springfield area. Improving its competitive position and success may well be the most significant factor in determining the region's economic future over the next two decades. This fact was recognized by industry cluster leadership, as was the recognition that Bradley was not yet a world-class airport.

Consequently, the cluster's Transportation Advisory Board was asked to review all aspects of the Bradley operation, as well as public-private management options, to determine what steps, if any, could be taken to improve Bradley's competitive situation.

Progress to Date

- ◆ A worldwide review of airport management arrangements and best practices was conducted in 1998 by Frasca & Associates, a leading airport transportation and financing consulting firm. This was completed in November 1998;
- ◆ In December 1998, DOT agreed to postpone the signing of the parking garage selection and an agreement was reached between the Governor's Council, DOT and DECD to interview some of the world's leading airport managers regarding Bradley's potential and challenges;

- Interviews with eight of these airport management firms were conducted in early 1999;
- Based upon this, DECD, in conjunction with DOT, issued an RFP and selected Schiphol Project Consult to conduct a four-month study of every aspect of Bradley's operation and to make recommendations on how to improve its performance;
- At the same time, the Governor's Council asked Michael Gallis to prepare a special report on Bradley, drawing upon his larger study prepared for the Connecticut Regional Institute for the 21st Century;
- Both the Schiphol recommendations and Gallis report will be completed and presented to the Governor's Council in December.

Challenge

The Schiphol review of Bradley and their recommendations are likely to be informative and challenging. Because Bradley's success is so essential for the economic development of the Hartford–Springfield region, it will be important that their findings be reviewed carefully and objectively.

E. Connecticut Inner-City Business Strategy

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Connecticut's economic competitiveness strategy aims to build a strong economy for all state residents by marshaling all the competitive advantages the state has to offer. To achieve that goal, we must address the challenges and potential inherent in our inner cities. That's the role of Connecticut's Inner City Business Strategy, which began in May 1999.

The mission of Connecticut's Inner-City Business Strategy is to increase income, wealth and employment opportunities for inner-city residents by:

- Capitalizing on the opportunities for inner-city business growth;
- Alleviating barriers to inner-city business growth;
- Linking inner-city residents to jobs in the region.

Sophisticated and data-driven, this process is unlike any undertaken before. And it draws on the energy and talent of city residents and business people to identify and build upon the competitive advantages unique to each city.

Progress to Date

- ◆ Each city's team has a business "champion," an advisory board and a research group
- These specially trained teams have completed a disciplined, data-rich benchmark study that:
 - Identifies each inner city's geographic, economic and demographic characteristics

- Compiles information on all economicdevelopment programs affecting each inner city
- Pinpoints the clusters with the greatest potential for growth in each region
- Identifies key strengths and weaknesses of each inner city as a place to do business
- Outlines strategies for capitalizing on strengths and dealing effectively with disadvantages, both real and perceived
- In December, teams will present a strategic action plan to the Governor's Council on Economic Competitiveness and Technology.

Challenge

Among the significant challenges facing the Governor's Council on Economic Competitiveness and Technology and the Department of Economic and Community Development are determining how

- Gain broad-scale support for the inner-city initiative
- Support the activation of urban industry clusters
- Foster development of demand-driven workforce training networks for inner-city residents

See following pages for details.

Connecticut Inner-City Business Strategy

"In these times of economic prosperity a pressing challenge facing every state and city is to widen this prosperity to citizens who have been left behind. A healthy inner city economy, with a vibrant business base, is the key to improving the job, income and wealth creating opportunities for inner city residents. Every city must have a strategy built on the competitive strengths of the inner city and engage the private sector in inner-city business growth"

Michael E. Porter, Professor, Harvard Business School

In the spring of 1999, the Governor's Council on Economic Competitiveness and Technology and the Department of Economic and Community Development (DECD) launched the Connecticut Inner-City Business Strategy Initiative in partnership with Michael Porter and his non-profit corporation, Initiative for a Competitive Inner City (ICIC).

The Connecticut Inner-City Business Strategy is radically different from previous efforts to revitalize urban areas. It addresses the inner city from an economic perspective, focusing on each city's economic potential and competitive advantages. It concentrates on creating businesses and job opportunities in the inner city by leveraging the industry clusters in the region.

As part of Connecticut's Inner-City Business Strategy, more than 250 business, civic and community leaders in Bridgeport, Hartford, New Britain, New Haven and Waterbury are working in teams to develop urban revitalization strategies and identify business growth opportunities in their inner cities.

Each city's team has a business "champion," an advisory board and a research group. Business and

neighborhood leaders who are already doing business in the inner city are active on these teams. Together, they will forge a common agenda for business development in their inner cities and create practical strategies to link inner-city residents with the most dynamic industry clusters in the region.

Corporate Champions

The five corporate champions leading the project are:

Bridgeport - Mickey E. Herbert, CEO & President,

Bridgeport Bluefish

New Britain - Gregory Howey, President,

Okay Industries

Waterbury - Frederick Luedke, President,

NEOPERL, Inc.

Hartford - Art Marquardt, President & CEO,

CTG Resources

New Haven - Nathaniel D. Woodson,

CEO & President,

United Illuminating Company

Mission

The mission of the Connecticut Inner-City Business Strategy is to increase income, wealth and employment opportunities for Connecticut inner-city residents by:

- Capitalizing on the opportunities for inner-city business growth
- ◆ Alleviating barriers to inner-city business growth
- Linking inner-city residents to jobs in the region

PROGRESS

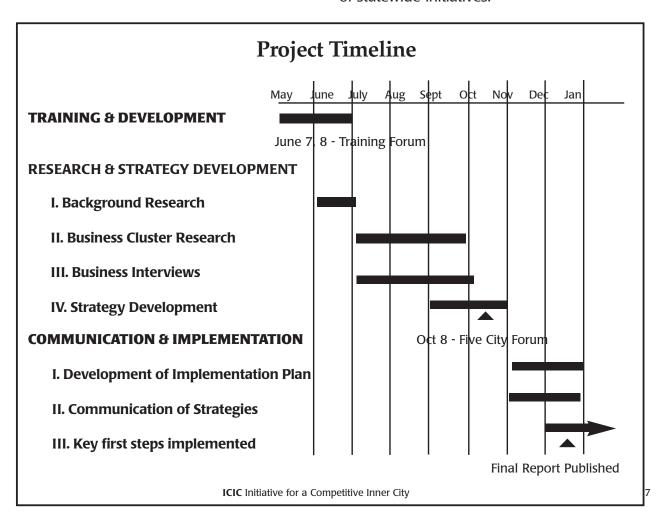
Since its launch in the spring of 1998, the Inner-City Business Strategy has made remarkable progress.

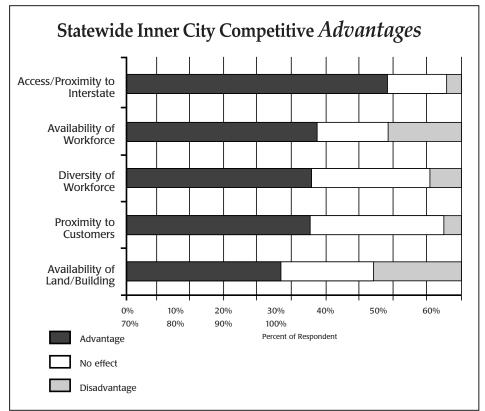
Information Gathered and Analyzed – Each team has completed a disciplined, data-rich benchmark study of its inner city. As a result, they have:

- Identified each inner city's geographic, economic and demographic characteristics
- Compiled information on all economicdevelopment programs affecting each inner city

- Identified the clusters with the greatest potential for growth in each region
- Identified key strength and weaknesses of each inner city as a place to do business
- Outlined strategies for capitalizing on strengths and dealing effectively with disadvantages, both real and perceived

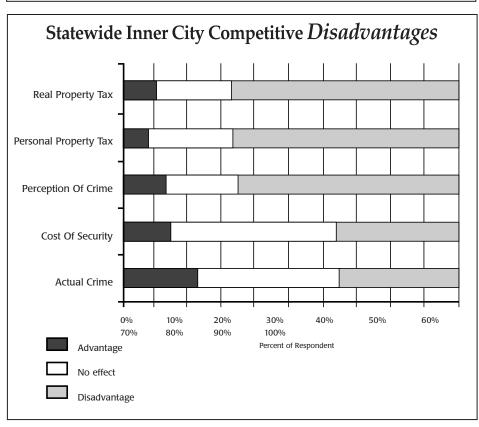
Practical Steps Planned – In December, teams will present a strategic action plan to the Governor's Council on Economic Competitiveness and Technology. The plan will include both specific action strategies for each of the cities and a series of statewide initiatives.





Key Findings –

On a statewide basis, utilizing information obtained from surveys and discussions with businesses, teams have identified the following advantages and disadvantages of the inner cities:



Key Clusters Identified – Knowing which industry clusters – in the inner city and in the region – have the greatest potential for growth is critical to developing a successful action plan for the inner cities. Information gathered and systematically

analyzed by inner-city teams enabled them to identify the industry clusters most important to each city and those with potential for development statewide. The following is a brief overview of the inner city clusters.

Opportunities for Inner-City Cluster Collaboration					
E	Bridgeport	New Haven	Waterbury	New Britain	Hartford
Health Services		~	~	~	✓
Metal Manufacturing	g 🗸	~	~	✓	
Entertainment	•	✓		✓	
Financial Services			~		✓
Retail			✓		✓
Office Services	~	✓			
Transportation	~				✓
Education		✓		✓	
Construction					✓
Printing & Publishin	g	~			

Strategies Developed – Teams are in the final stages of developing strategies to strengthen inner-city industry clusters and link residents with regional industry clusters. Certain strategies are focused upon an individual city and others are applicable statewide. They fall into the following general categories:

- ✓ Job Readiness and skill training
- Entrepreneurial training
- Incubators and business development advisory services
- Cluster network formation
- Commercial franchising
- ✓ Site availability and brownfields
- Marketing and changing perceptions of private investors and inner-city residents
- Local government permitting, processing and culture
- ✓ Technology and accounting capability
- ✔ Greater tax advantages for investing
- ✓ Filling retail gaps
- ✓ Strengthening local, ethnic businesses
- Transportation
- Capital availability

Team Collaboration – On October 8, as the teams entered into the final stage of the project, ICIC and DECD hosted a full-day forum at Yale University to give each team an opportunity to learn from others and share their insights and strategies. At the forum, each team presented its preliminary findings and recommendations for inner-city business growth. A panel of industry experts critiqued the presentations, suggesting areas for further exploration, identifying the strengths and weaknesses of recommendations, and advising on potential implementation models. This session was an excellent opportunity for teams to learn about each other's projects and identify opportunities for statewide collaboration, as well as enhance their own strategies.

F. Regulatory Environment

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Small and midsize companies are vital to a strong economy. Requirements that are cumbersome, confusing and costly hinder their growth and competitiveness. Streamlining the regulatory environment is an important issue area outlined in the Partnership for Growth report.

Progress to Date

- ◆ A year ago, OPM, DECD and CERC launched Smart Start, a free service to guide new or expanding businesses through the regulatory process. Since then, Smart Start has
 - Had 160 appointments
 - Provided assistance to an additional 1,500 individuals and businesses
 - Handled more than 100 phone inquiries each month
 - Experience a steady increase in the number of Internet inquiries

- State agencies have reduced the number of licenses, permits and registrations required.
- Agencies are improving customer service and making forms available on the Internet.

Challenge

The groundwork has been laid, but much more must be done to reach the goal of creating a competitive, efficient and flexible regulatory environment.

See following pages for details.

Smart Start

PROGRESS

Smart Start, the business registry service initiated by OPM and DECD and overseen by the Connecticut Economic Resource Center, Inc. (CERC), has been instrumental in guiding new and expanding businesses through the regulatory process.

Since opening its doors a year ago, Smart Start has:

- Made 160 appointments
- Assisted an additional 1,500 individuals and businesses
- ◆ Handled more than 160 phone inquiries
- Seen a steady increase in Internet inquiries
- Experienced a steady increase in activity overall

A free service, Smart Start simplifies the registration process by:

- Outlining the registration needs for business entities.
- Helping the business complete the registration forms accurately and submit them to the appropriate agencies.
- Collecting agency fees in one check.

The program continues to expand, and now has an office in Bridgeport (open every Wednesday) as well as in Rocky Hill.

Recent marketing activities in support of Smart Start include:

- Three-week radio campaign ran last week of September into the first two weeks of October.
 Plans for another three-week campaign in March 2000.
- ◆ Appearances on WVIT's (Ch. 30) Newsmakers with Tom Monahan.
- Live radio interviews: WICC Bridgeport, ESBN Radio Norwalk, WPLR-FM Hamden/New Haven.
- Press coverage from media kit/success stories/Bridgeport opening being gauged
- Creation of legislator newsletter.
- Working with BioScience Cluster to assist new business registration.
- Networking functions and speaking engagements promoting Smart Start.

G. Marketing

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Connecticut needs a cohesive, sustained and consistent promotional effort in order to capture the attention of key audiences in today's aggressive and competitive global environment. Connecticut has a superior location and many other unique advantages that can be leveraged to greater advantage by a well planned, well executed marketing campaign.

Progress to Date

- Adopted new positioning line for state: You Belong in Connecticut
- First You Belong in Connecticut campaign launched; media outreach resulted in nearly 3,000,000 impressions designed to raise the public's awareness of Connecticut as an attractive place for young professionals
- SNET and Webster Bank enlisted in promoting You Belong in Connecticut.
- ◆ You Belong in Connecticut Web site activated.
- Relationship formed with ACCESSHartford, a young professionals group.
- Three more You Belong in Connecticut campaigns planned, focused on business and job opportunities at leading companies, the BioScience Cluster, and out-of-state business recruitment.
- Media outreach successful.

Challenge

- Create a plan and generate the resources needed to sustain a comprehensive, long-term promotional effort.
- Build on groundwork being laid by the targeted campaigns that are currently under way or in the planning stages.
- Accelerate the marketing of clusters as the foundation of the state's economic-development strategy to generate awareness, support and involvement.
- Keep people informed and involved in clusters through emphasis on public relations, events, limited advertising and direct mail.

See following pages for details.

Marketing

A key finding of the industry clusters' Marketing Advisory Board was the recognition that in this aggressive and competitive global environment Connecticut needs a more cohesive, sustained and consistent promotional effort.

Connecticut has a superior location and numerous other unique advantages. Yet the state's image has not been fully leveraged, due in part to multiple slogans over recent years — from "The Land of Steady Habits" and the "Nutmeg State" to "The State That Thinks Like a Business" and "Connecticut — Where Technology's Going."

Connecticut needs a unifying, sustainable image that articulates and answers the question: "Why Should I Be Here?"

It will take some time to create a plan and generate the resources needed to sustain a comprehensive, long-term promotional effort. The groundwork is being laid by the targeted campaigns currently under way or in the planning stages.

We must accelerate the marketing of clusters as the foundation of the state's economic development strategy to generate awareness, support and involvement. Emphasis on public relations, events, limited advertising and direct mail will help to keep people informed and involved.

PROGRESS

You Belong in Connecticut, the new positioning for the state adopted by the Marketing Advisory Board, is now in use. The tag line was chosen for its ability to work as an umbrella message for multiple, targeted campaigns. You Belong in Connecticut is target-focused, promotes feelings of being wanted and being able to make a difference, works for in- and out-of-state targets, and is proud and positive about the state.



First You Belong in Connecticut Campaign Yields Almost 3,000,000 Impressions — Over the summer (July-September) the first You Belong in Connecticut campaign, designed to address workforce-development issues, was successfully run. Overseen by CERC and CRN International, the campaign focused on informing Connecticut's young people (students and young members of the workforce) about educational and business/job opportunities, as well as entertainment/recreation activities and quality of life.

The campaign resulted in almost 3,000,000 impressions. It consisted of:

- Radio advertising and programming.
- Outdoor (billboards, bus cards, aerials).
- Merchandise (t-shirts, hats, lanyards, frisbees and beach totes).
- Events, including a college fair and Big E booth.
- A Web site.
- A full public relations complement to the campaign, which resulted in numerous media placements.

youbelonginCleom

Web site – The Web site has been an important medium for reaching the target audience of our first campaign – students (high school and college) and young members of the workforce. Statistics for July, August and September are below:

Month	Hits	Visits	Unique Visitors	
July	63,969	4,318	1,844	
August	111,538	6,315	3,011	
September	250,997	13,063	7,164	

Leveraging Campaign Dollars

Media and Corporate Support of Campaign -

The first You Belong in Connecticut campaign garnered strong support from media outlets in the state, such as radio stations' donating extra airtime or helping staff events. Now SNET and Webster Bank are making significant contributions as well. Each new phone book published by SNET this year will carry the You Belong in Connecticut logo and Web site address (www.youbelonginct.com), dramatically increasing the exposure of the campaign's message. Webster Bank plans to add the logo to its monthly statements and its ATMs in the state.

Collaboration with ACCESSHartford – During the course of the campaign, a relationship formed between the campaign and ACCESSHartford, a young professionals group in the MetroHartford region. We will continue to work with them to help get our message out to the target audience.

Upcoming Campaigns

Additional Campaigns Planned — Three more campaigns branded with the *You Belong in Connecticut* tag are currently being planned. The first to launch will be the "Connecticut Business Profiles," which highlights business and job opportunities at some of Connecticut's leading companies. The campaign is a part of the Cluster Initiative Sponsorship effort that has been under way since the spring. Next up is the BioScience Cluster's marketing campaign, scheduled to launch in January of 2000. Also scheduled to launch in the first quarter of 2000 is a new out-of-state business recruitment campaign.

H. Business Action Team

Executive Summary

Importance to Strategy

To retain and attract the businesses critical to a strong economy, the state must be able to respond quickly to business needs. The Business Action Team, formed in September 1999, brings together myriad economic-development, regulatory, financing, training and other resources to create a single, streamlined body that can meet the needs of needs of expanding or relocating businesses quickly and effectively.

Progress to Date

- Identified public and private organizations involved in business recruitment and expansion and structured a plan to coordinate efforts
- Established a Business Action Team comprising representatives from DECD, CERC and CDA
- Currently managing approximately 50 domestic and international prospects and clients.
- Conducted two European visits, resulting in at least a half-dozen interested prospects

Challenge

- Build a formal relationship with other key state agencies in order to help important businesses get support from and deal with the various agencies.
- Involve additional state, local, regional and private resources in the team.
- Continuously improve the team's ability to identify opportunities and respond efficiently and effectively to business needs.
- Build a workforce-recruitment service for companies.

Please see following pages for details

Business Action Team

Industry cluster advisory boards detailed in February 1998 the need for Connecticut to compete effectively for quality economic development, both in the retention of existing businesses and the attraction of new firms. Of primary interest was the ability to convert the myriad of economic-development, regulatory, financing, training and education and other organizations into an efficient network able to respond quickly to meet the needs of expanding and relocating companies.

PROGRESS

The Department of Economic and Community Development (DECD) retained a Connecticut consulting firm to review the various private and public organizations involved in recruiting and expansion and to recommend how they could best be coordinated to achieve the strategic business goals of the state. As a result:

- A Business Action Team was established within DECD. The initial team includes representatives from DECD, the Connecticut Development Authority (CDA), and the Connecticut Economic Resource Center, Inc. (CERC). The team is co-chaired by the DECD Deputy Commissioner and CDA Executive Director and meets weekly.
- 2. The Business Action Team is currently managing approximately 50 domestic and international prospects and clients.
- 3. Team members have made two recruiting visits to Europe, resulting in a half-dozen

- prospects interested in Connecticut as a North American location.
- 4. The Business Action Team is currently planning ways to expand the concept and carve out roles for:
 - ◆ DECD regional field offices
 - Other state agencies that are or should be involved in the development process
 - Other economic-development-minded organizations such as the utilities
 - Regional and local economic-development officials
 - Interested private-sector multipliers such as banks, attorneys and accounting firms
- 5. DECD has expanded its recruitment staff with the addition of a third recruitment manager to support both international and domestic efforts, as well as adding international development officials to the "rapid response" activities. Additionally, planning staff has been added to develop and maintain relationships with other state agencies, to assist recruitment staff sort through regulatory matters, and to undertake a comprehensive effort to simplify the permitting process for the Business Action Team client.
- 6. The team reviews clients and leads produced through promotion, trade shows, sales calls, etc. and develops action plans to quickly and effectively address the needs of these companies. Each member often has unique information that is shared with the group in order to better serve the client.

I. International

Executive Summary

Importance to Strategy

To compete and prosper in an increasingly global economy, Connecticut companies must seek out new markets and establish strategic partnerships in locations worldwide. The state provides resources, guidance, and networking opportunities to help state companies take the steps necessary to engage in international trade.

Progress to Date

- Trade representatives in six key markets worldwide assisted 129 Connecticut companies during the past six months with distributor/rep searches, referrals and general information.
- Foreign Direct Investment (FDI) initiatives resulted in five overseas companies locating in Connecticut and one electing to expand here.
- DECD staff made 93 on-site company visits, presented four export seminars, made 12 presentations to professional and trade associations, and took part in seven protocol engagements with government officials to advance Connecticut's role in international trade.

- DECD Africa Initiative launched and currently under way
- Cooperative efforts under way with 10 Northeastern states
- DECD sponsoring International Matchmaking Event at major information technology trade show
- Connecticut-Israel Technology Trade Summit held
- Continuing to strengthen ties between Connecticut and the German state of Baden-Württemberg

Challenge

- Help more Connecticut companies take advantage of international trade opportunities
- Follow up on investment leads generated through discussions with overseas delegations
- Review and modify International Strategy with the assistance of international professionals in the public and private sector

See following pages for details.

International

PROGRESS

◆ Trade Representatives — DECD now has Trade Representatives in six markets: Sub-Saharan Africa, Mexico, Brazil, Argentina, Israel, and China. In the past six months, these representatives assisted 129 Connecticut companies in their international trade efforts through distributor/rep searches, referrals and general information.

We are currently investigating the appointment of a representative in Turkey. In order to strengthen and intensify Foreign Direct Investment (FDI) Initiatives, DECD established a European Trade and Recruitment Representative in Stuttgart, Germany.

◆ Federal Direct Investment Initiatives –

These initiatives have resulted in five overseas companies' deciding to locate in Connecticut and one electing to expand here. The four new companies are:

Schuecko-Homecraft Inc., Newington (Germany)

Established a sales office for replacement windows and, shortly thereafter, acquired Homecraft Inc. Currently employs 250 people.

Leipold Inc., Windsor (Germany)

This established precision part manufacturer currently employs 25 people, and expects to grow to 40 employees by the end of 2000.

Martin Bock, Newton (Germany)

Established a marketing office employing five people.

Rainbow Grower's Group, Suffield (Nedeherlands)

Employs 120 people.

Hoya Lens, Inc., Bethel (Japan)

Established a manufacturing facility which, when completed, will employ 200 people.

- Outreach Efforts DECD's trade specialists fielded over 190 commercial inquiries per month and have continued their networking activity. Staff engaged in 93 on-site company visits, 7 protocol engagements with various government officials, and 4 export seminars for small to midsize businesses. Additionally, they made 12 presentations to various professional and trade associations.
- ◆ Africa Conference and Initiative Hosted an Africa Business Conference on April 20 and 21 to provide a practical approach to doing business in Sub-Saharan Africa. The conference attracted 250 people, including key business and government leaders from seven Sub-Saharan countries. The highlight of the conference was a videoconference with the U.S. Minister Counselor for the Southern Cone in Johannesburg, South Africa. The conference kicked off the DECD Africa Initiative and attracted major publicity in several newspapers around the state. A forum on South African business opportunities is planned for the first week of December.
- ◆ National Summit on Africa DECD's Director of Africa Marketing was elected chairperson for Connecticut's 24-person delegation to the National Summit on Africa that will be held in Washington from February 17 to 20, 2000. More than 1,800 delegates will gather to finalize the "National Policy Plan of Action of U.S.-Africa Relations into the New Millennium."

- ◆ Regional Cooperative Efforts Multi-state and regional cooperative efforts continue to be supported and enhanced through Connecticut's participation in the Eastern Trade Council (ETC) of the Council of State Governments Eastern Regional Conference. The ETC serves as a catalyst for public/private sector regional cooperation in export trade promotion, and its members include the 10 Northeastern states. Also, DECD has increased its involvement in NASDA's International Division and is currently participating in drafting the first strategic plan.
- ◆ International Matchmaking at COMDEX This fall, DECD is sponsoring an International Matchmaking Event at COMDEX, the premier Information Technology trade show, to be held in Las Vegas Nov. 15 to 19. Under the auspices of NASDA, 14 state development agencies have joined forces to help companies from their respective states maximize their international sales potential through domestic trade show participation.
- ◆ Connecticut-Israel Trade Summit A
 Connecticut-Israel Technology Trade Summit
 took place on Oct. 21, 1999, at Yale University.
 The summit, organized by the ConnecticutIsrael Exchange Commission (CONNIX),
 provided a forum for Israeli and Connecticut
 companies and research institutions in several
 technology industries to showcase their
 products and innovations to promote
 commercial collaboration.
- ◆ Baden-Würrtemberg Initiative Advances —
 Celebrating and strengthening the ties that exist between Connecticut and the German state of Baden-Württemberg, Governor Rowland, DECD, and the Department of Higher Education welcomed a 95-member delegation, led by Prime Minister Erwin Teufel, to the State Capitol on September 28. DECD is planning a recruiting mission to Germany in November to follow-up on many of the investment leads generated by the Baden-Würrtemberg visit to Connecticut.

J. Legislation

Executive Summary

Importance to Connecticut's Competitiveness Strategy

Vibrant industry clusters can develop and flourish only where public policy creates an environment conducive to business growth. State government is acting in the best interests of all Connecticut residents when it crafts public policies designed to attract and retain businesses. Business leaders themselves are in the best position to establish legislative agendas designed to foster a strong business climate.

Progress to Date

- ◆ Legislation recommended by Connecticut business leaders and passed by the General Assembly in 1998 improved Connecticut's business climate and laid the groundwork for future initiatives. The 1998 Cluster Bill extended the 6 percent R&D tax credit to smaller companies and allowed companies to carry R&D tax credits forward for 15 years.
- During the 1999 legislative session, the General Assembly enacted Public Act 99-173, industry cluster legislation that will help create jobs and increase the gross state product by \$84.7 million over 10 years.

- ◆ Key elements of the legislation include:
 - An R&D Tax Credit Exchange that clearly puts Connecticut at the forefront of states friendly to high-tech start-ups and growth companies
 - A provision that puts Connecticut on a par with 30 other states by allowing small companies to carry forward net operating losses for 20 years, instead of five
- With enactment of these laws, Connecticut has created a competitive R&D environment that encourages business growth.

Challenge

The Governor's Council, state agencies, cluster organizations, business organizations and others must continue to work together to propose and support legislation that enhances Connecticut's competitive position in the global economy.

See following pages for details.

Legislation

PROGRESS

Connecticut's business leaders have recommended legislative actions designed to give Connecticut a competitive advantage in the global market. Legislators and others in state government have recognized the merits of these recommendations and incorporated them into sound public policy.

The first Cluster Bill, passed by the 1998 session of Connecticut's General Assembly, both improved Connecticut's competitive position and laid the groundwork for future legislation. That bill included provisions that extended the 6 percent R&D tax credit to smaller companies and allowed R&D tax credits to be carried forward for 15 years.

This year, the Commissioner of the Department of Economic and Community Development is hailing 1999 economic cluster legislation that will help create jobs and increase the gross state product by \$84.7 million over 10 years.

Public Act 99-173, passed during the 1999 Legislative Session, creates two important changes to Connecticut's tax system:

◆ First, it creates a research and development Tax Credit Exchange that will allow companies to exchange credits they've earned but can't use. They will exchange the credits for a payment from the state equal to 65 percent of the credit's value. They can only sell them to the state, not to other companies. The tax credit exchange will put Connecticut on the map as being a high-tech-friendly state. Secondly, the legislation allows small companies to carry over their **Net Operating Losses** on their corporate income taxes for 20 years instead of the current five years. At five years, Connecticut's loss carry-over provision was the lowest in the country. At 20 years, Connecticut will be on par with 30 other states, making Connecticut much more attractive for small or new companies looking for a place to locate.

Significance of Legislation — This legislation makes Connecticut the only state that has the strength of the loss carry-over provision combined with a tax credit exchange program. The legislation will assist many small companies that conduct a lot of research and development activities that typically generate net operating losses during their early years. These companies tend to locate in states that give them ample time to succeed. This program will help them decide that they belong in Connecticut.

Effective Dates – The act was passed unanimously by both the House and the Senate. The tax credit exchange shall be applicable to taxable years commencing on or after Jan.1, 2000. The loss carry-over provision applies to income years commencing on or after Jan. 1, 1999.

Supporting Organizations – The effort to approve the legislation was led by the Governor's Council on Economic Competitiveness, with support from DECD, the Office of Policy and Management, the Connecticut Business and Industry Association, Connecticut United for Research Excellence and the Connecticut Technology Council.

Appendix

Governor's Council on Economic Competitiveness and Technology

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Governor

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Chairman & CEO Webster Bank

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President & CEO Pitney Bowes

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Vice President & COO Physical Therapy & Sports Medicine Associates

Karen A. Coughlin

President & CEO, Northeast Region Foundation Health Systems, Inc. ñ Physicians Health Services

Philip D. Cusano

President & CEO Stamford Health Systems

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Daniel D. Dechamps

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Chairman & CEO DeMaria Electro-Optics Systems

Judith DePaul

Vice Chairman & CEO IBP Aerospace Group

David D'Eramo, Ph.D.

President & CEO Saint Francis Hospital and Medical Center

Arthur H. Diedrick

Chairman of Development
Connecticut Development Authority

Peter M. Donovan

President & CEO Wright Investors Service

Senator M. Adela Eads

Minority Leader – Senate 30th District

Robert W. Fiondella

Chairman, President & CEO Phoenix Home Life Mutual Insurance Company

Emil F. Frankel, Esq.

Counsel

Day, Berry & Howard

Claire L. Gaudiani, Ph.D.

President

Connecticut College

Chris A. Gentile

President

Certified Ambulance Group

R. Nelson Griebel

President & COO MacDermid, Inc.

Janice M. Gruendel, Ph.D.

Executive Director Connecticut Voices for Children

Mickey E. Herbert

Chairman

Bridgeport Bluefish

Gregory B. Howey

President

OKAY Industries

Raymond J. Huey

President

Corometrics Medical Systems

Senator George C. Jepsen

Majority Leader – Senate 27th District

William J. Kaufmann

Chairman & CEO Connecticut Economic Resource Center, Inc. (CERC)

Karl J. Krapek

President & COO United Technologies Corporation

Marvin Lender

Vice Chairman M&M Investments, LLC

Richard C. Levin, Ph.D.

President Yale University

Frederick L. Luedke

President NEOPERL, Inc.

Rep. Moira K. Lyons

Speaker of the House 146th District

Arthur C. Marquardt

President & CEO CTG Resources, Inc.

Lawrence McHugh

Vice Chairman Connecticut Tourism Council

Thomas J. McInerney

President

Aetna Retirement Services

E. Philip McKain

President CTE. Inc.

John Meehan

President

Hartford Hospital

Michael P. Meotti

Chairman

Connecticut Economic Conference Board (CECB)

George M. Milne, Jr., Ph.D.

President

Pfizer, Inc., Central Research Division

Thomas H. O'Brien, Jr.

President

First Union National Bank

Howard Odom

President

Ortronics

John D. Opie

Vice Chairman

General Electric Company

Harry H. Penner

President & CEO Neurogen, Inc.

Rep. David B. Pudlin

Majority Leader – House 24th District

Elaine A. Pullen

President & CEO Trident International, Inc.

Douglas B. Rose

President Aero Gear

Marc S. Ryan

Secretary
State of Connecticut
Office of Policy & Management

Theodore S. Sergi, Ph.D.

Commissioner

Department of Education

Albert R. Subbloie

President & CEO Information Management Associates, Inc.

Senator Kevin B. Sullivan

President Pro Tempore – Senate 5th District

George J. Taylor, Jr.

Chairman & CEO

Farmstead Telephone Group, Inc.

Rep. Robert M. Ward

Minority Leader – House 86th District

Allen Weintraub

Chairman

Advest Group, Inc.

John K. Welch

President

Electric Boat Corporation – General Dynamics Company

Janis M. Wertz-Hadley, Ed.D.

President

Housatonic Community-Technical College

Nathaniel D. Woodson

President & CEO United Illuminating

Governor's Council on Economic Competitiveness & Technology

Mission, Structure and Responsibilities

Mission:

Make Connecticut a prime location in which to start or grow a business, and create secure, fulfilling and well paid career opportunities

Promote innovation, productivity and competitiveness through industry cluster economic development

Act as a vehicle and voice to put forward the views and suggestions of industry clusters that are created

Oversee the implementation of the cluster recommendations in the Partnership for Growth report.

Structure and Responsibilities:

Governor's Council:

The Governor's Council is co-chaired by the Governor and a prominent business leader. The Governor appoints members of the Council. It consists of business and legislative leaders, along with top executives from academic and medical institutions, organized labor, non-profit organizations, and key government agencies.

Two meetings will be held each year, with the option of additional special sessions. One meeting will be held prior to each General Assembly session, and the second meeting with be held during or shortly after the close of each session. Only Council members can attend these meetings.

Executive Committee:

The Executive Committee is made up of the co-chairs and vice chairs. Vice Chairs will represent different industries and geographic areas of the State.

Cluster Leadership Committee:

The Cluster Leadership Committee consists of the Executive Committee members and the chairs of the Industry Clusters, and Economic Foundation and Issue Advisory Boards. Its responsibility is to provide ongoing guidance and support to the Governor, legislative leaders, and the Commissioner of the Department of Economic and Community Development in their attempts to improve Connecticut's competitiveness.

Economic Foundation and Issue Advisory Boards:

Economic Foundation and Issue Advisory Boards are created by the Governor's Council in order to:

further research key issues identified as constraints to business competitiveness in Connecticut;

develop strategies to implement recommendations put forward by industry clusters to overcome major impediments to their success; and

identify methods of assisting government agencies in effectively responding to the needs of Connecticut's businesses and citizens.

Membership on the Economic Foundation and Issue Advisory Boards can consist of a wide cross-section of Connecticut stakeholders. They will be people whose knowledge and influence can help shape and implement cluster priorities, and bring about constructive change in these areas.